Roadmap

Windows Server Strategy And Roadmap

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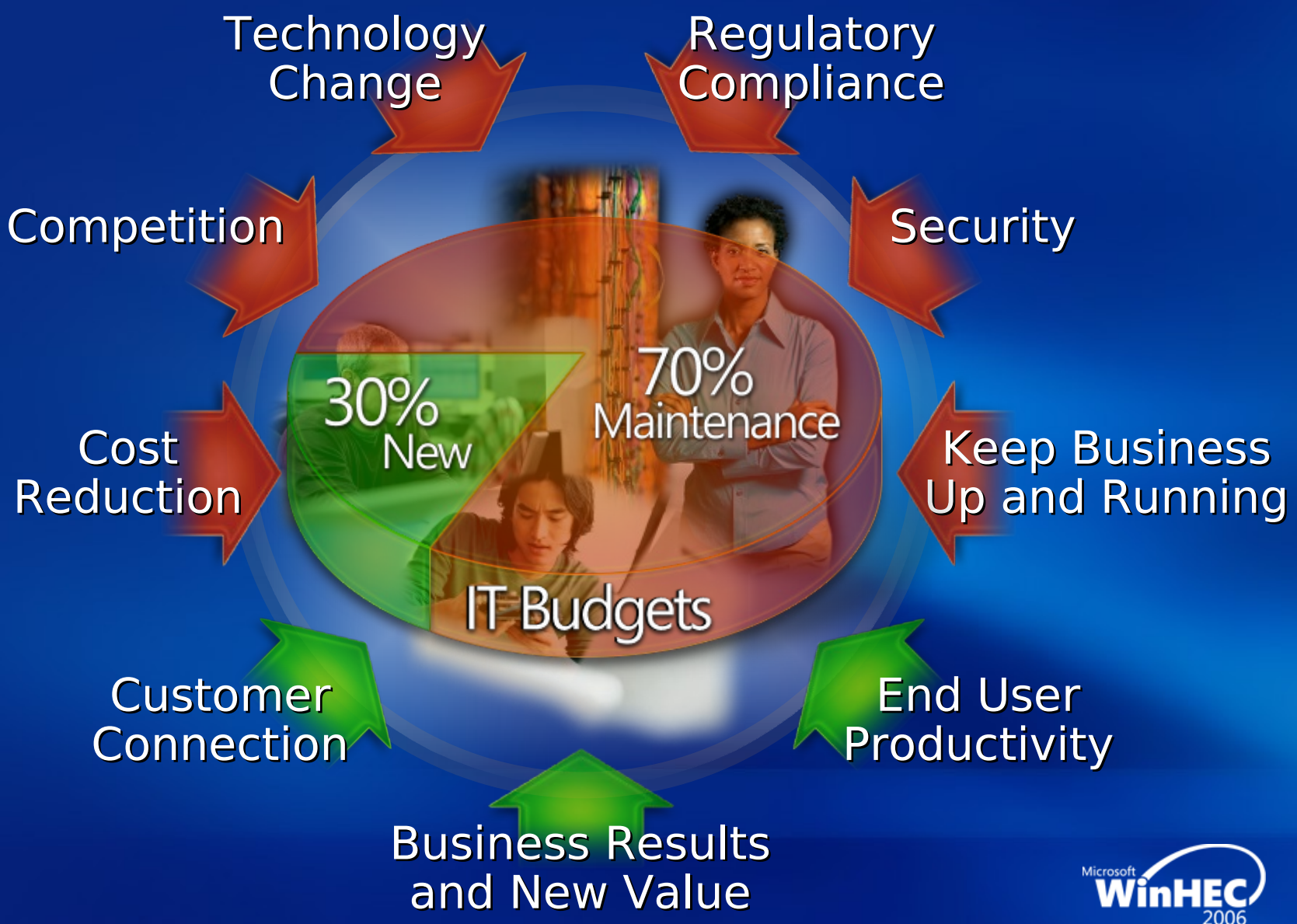
More Pressure Than Ever on IT



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People Drive Business Success

Microsoft's Promises to You

Enabling IT Pros & Development Teams Across the IT Lifecycle

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A Solid Foundation for People – Ready Software

Microsoft Windows Server

- Control
  - Manage your environment
- Availability
  - Maximize uptime and productivity
- Flexibility
  - For your changing business needs

Server

Windows Vista

- Clear
  - User experiences
- Confident
  - Safe for users, easier for IT
- Connected
  - To information, people, and devices

Client

An Integrated Approach

Common Engineering Criteria

Security Infrastructure

Microsoft Internet Security & Acceleration Server

Microsoft Antigen

IT Operations Infrastructure

Microsoft System Center

Microsoft Systems Management Server 2003

Microsoft Operations Manager 2005

Applications Infrastructure

Microsoft SQL Server

Microsoft BizTalk Server

Collaboration Infrastructure

Microsoft Exchange Server

Microsoft Office SharePoint Portal Server

Microsoft Office Live Communications Server 2003

Microsoft Windows Server

Microsoft Visual Studio

Microsoft Windows Server System

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Microsoft's Promises to You

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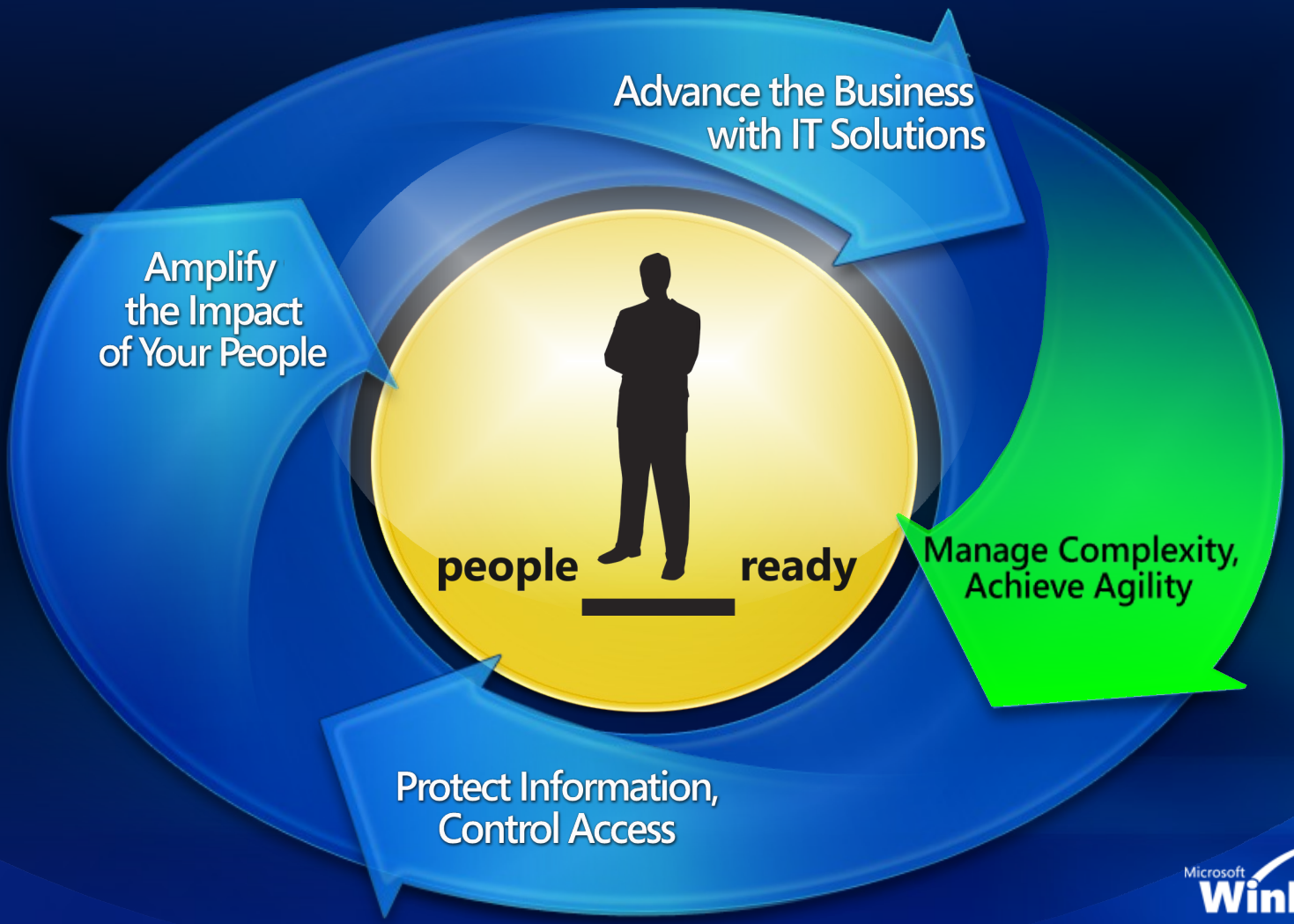

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Windows Server Vision

The Right Server for the Right Job

Self-managing Dynamic Systems

End-to-end Connected Systems Platform

Microsoft Windows Server

Secure, Anywhere Access

Universal Distributed Storage

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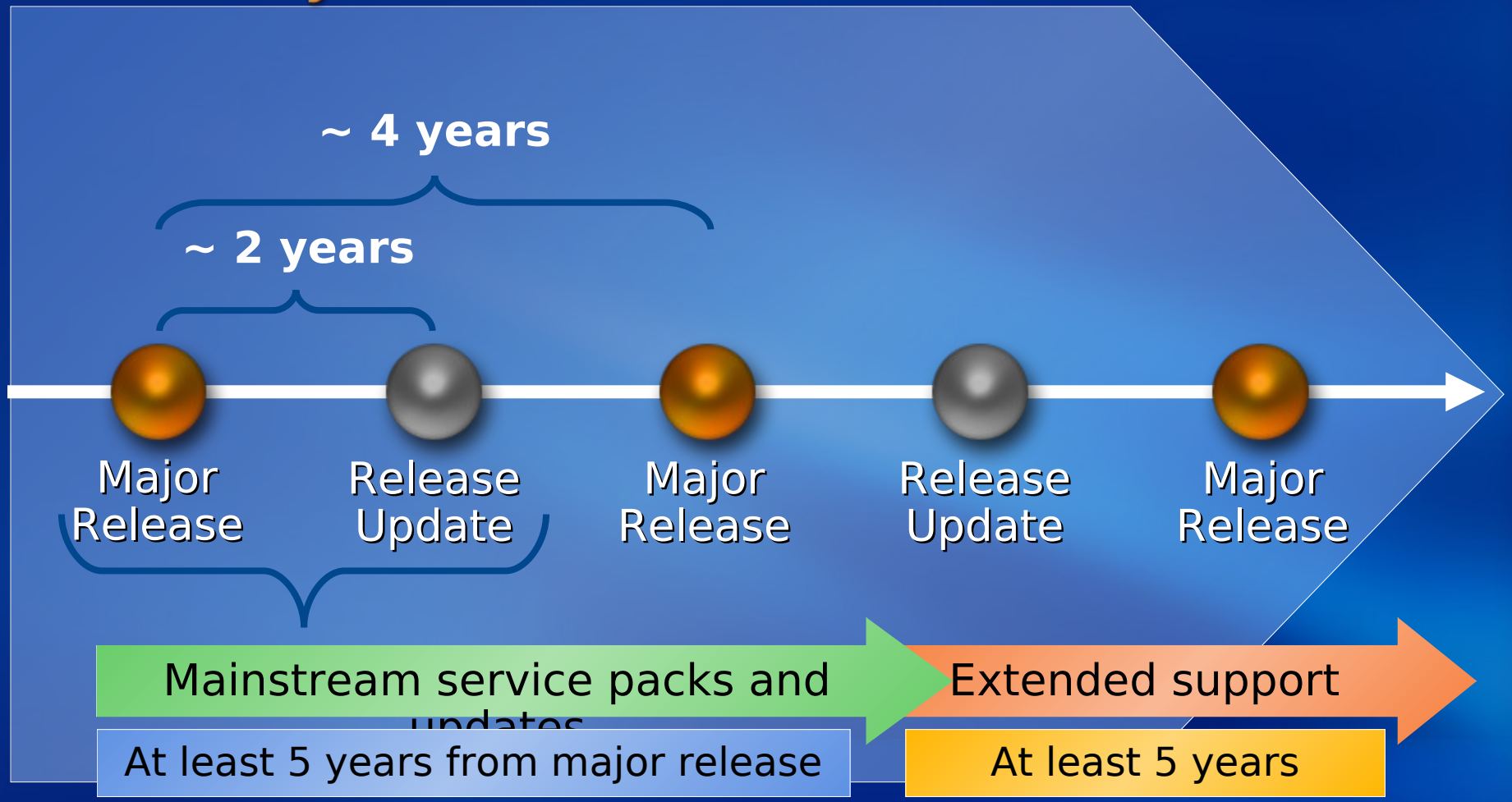
Microsoft Windows Server Release Cycle



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Windows Server Roadmap

2009

- Windows Server "Longhorn" R2

2007

- Windows Server "Longhorn"
- Windows Server "Longhorn" Beta 3

2006

- Windows Server 2003 Compute Cluster Edition
- Windows Small Business Server 2003 R2
- Windows Server "Longhorn" Beta 2

2005

- Windows Storage Server R2 ✓
- Windows Server 2003 R2 ✓
- Windows Server "Longhorn" Beta 1 ✓
- Windows Server Update Services ✓
- Windows Server 2003 x64 Editions ✓
- Windows Server 2003 Service Pack 1 ✓

Opportunities For Growth

Small and Medium Business

- 20+ million multiple PC SBs with no server
- 67% of servers in medium business

Scale-up and Consolidation

- Database and biz apps, consolidation
- 64 bit and virtualization enablers

Branch Office

- Over 25% of servers installed in branches
- Connectivity, migration, consolidation

Storage

- Largest server workload
- Consolidation, management pressures

High-Performance Computing

- Fast-growing server workload
- Not yet mainstream or integrated with IT

Growth
Opportunities For Growth

Small and Medium Business	Microsoft Windows Small Business Server 2003 R2 Microsoft Windows Server Codename "Centro"
Scale-up and Consolidation	Microsoft Virtual Server 2005 Microsoft Windows Server 2003 R2
Branch Office	Microsoft Windows Server 2003 R2
Storage	Microsoft Windows Storage Server 2003 R2
High-Performance Computing	Microsoft Windows Compute Cluster Server 2003

Microsoft Windows Server Code Name "Longhorn" Timeline

PDC
Sept 2005

Developer engagement

Beta 2
Q2 CY 2006

Enterprise engagement and deployment

Beta 3
H1 CY 2007

Customer Preview Program

Ship
2007

Broad availability

Community Technology Preview (CTP) Program Releases

AVAILABILITY

Microsoft®

Windows Server™

Code Name "Longhorn"

Operations Infrastructure

Control
Flexibility
Availability

Application Platform

Flexible Solutions
Connected Systems
Rich Experiences

Investment in the Fundamentals

Security

Reliability

Performance

Microsoft Windows Server
Code Name "Longhorn"

Operations Infrastructure

Terminal Services
Network Access Protection
Windows Virtualization
Centralized Role Management

Application Platform

IIS 7
WWF
WCF ("Indigo")
Federated Identity

Investment in the Fundamentals

Service Hardening
Windows Firewall

Server Core
Dynamic Partitioning

Next Generation TCP/IP
64x64-bit Cores

Investing In The Fundamentals

Security

- Threat modeling, tools, testing and code review
- Secure startup with BitLocker™ drive encryption
- Service hardening and user access control

Reliability

- Hot-pluggable subsystems and self-healing file system
- Server core and composite roles require fewer reboots
- Restart manager and re-startable active directory

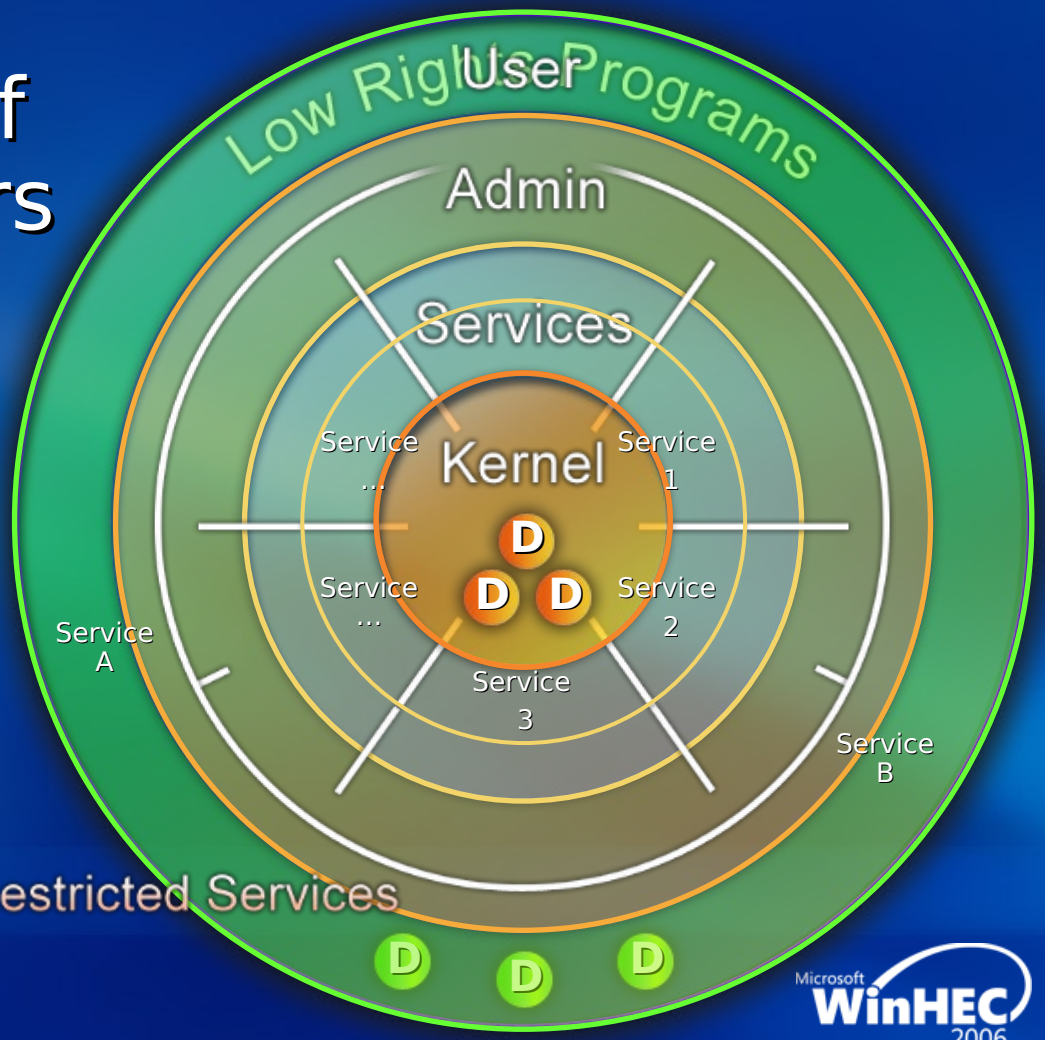
Performance

- Redesigned TCP/IP stack for better bandwidth use
- Optimized virtualization platform
- Support for 64x64-bit cores and 1TB RAM

Windows Service Hardening

Defense in depth – factoring/profiling

- Reduce size of high risk layers
- Segment the services
- Increase # of layers



D Kernel Drivers

D User-mode Drivers

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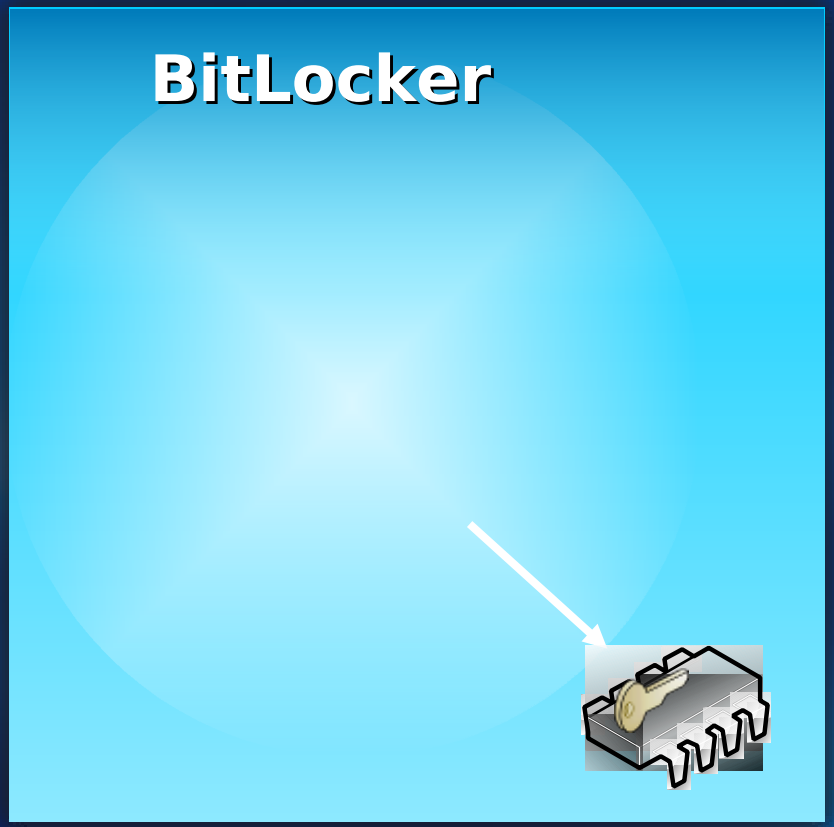
BitLocker™ Drive Encryption

- Designed specifically to help prevent a thief who boots another Operating System or runs a hacking tool from breaking Windows file and system protections
- Helps provide data protection for your Windows client system even when the system is unauthorized hands or is running a different or exploiting Operating System
- Uses a v1.2 TPM or USB flash drive for key storage



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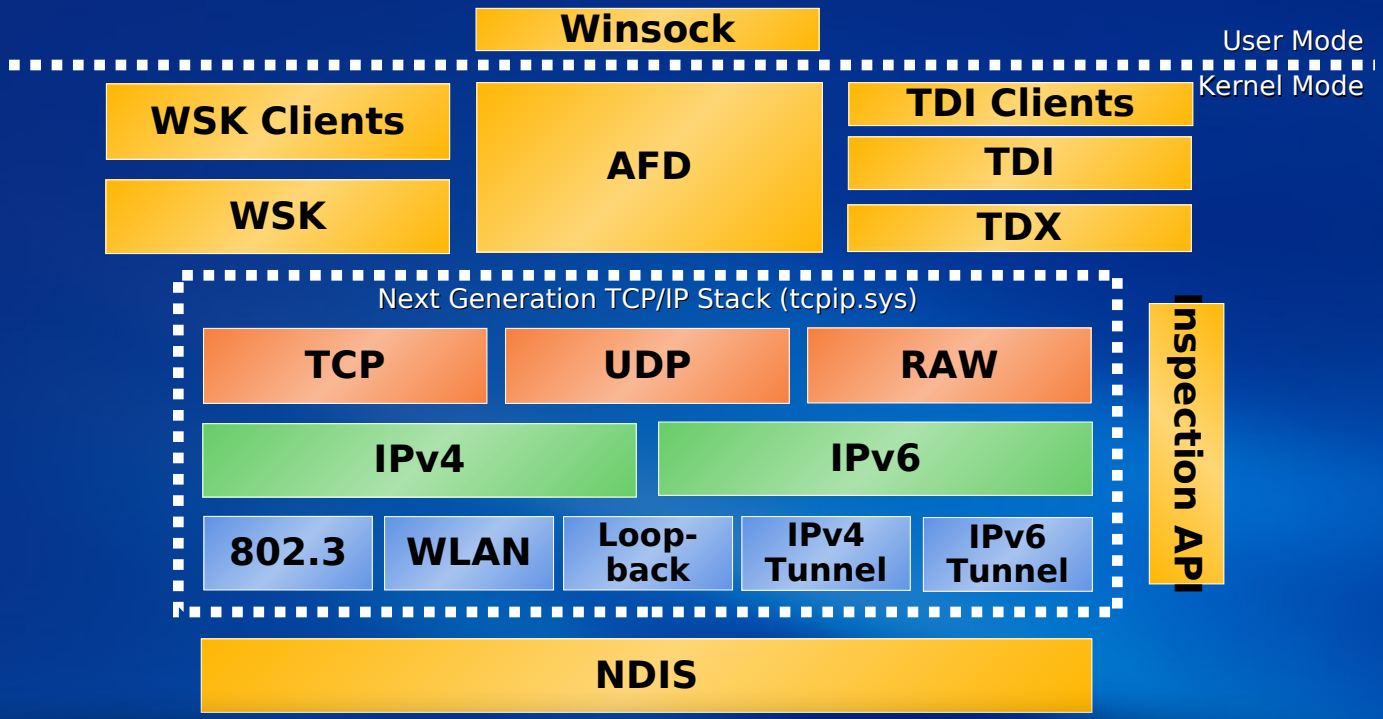
Complete Redesign Of TCP/IP



- Dual-IP layer architecture for native IPv4 and IPv6 support
- Seamless security through expanded IPsec integration
- Improved performance via hardware acceleration
- Network auto-tuning and optimization algorithms
- Greater extensibility and reliability through rich APIs

Operations Infrastructure

Control

- Centralized role management and configuration
- Integrated eventing, reporting and task scheduling
- Policy based networking with Network Access Protection

Availability

- Enhanced clustering capabilities
- Windows Hardware Error Architecture
- Reduced downtime with hot-replaceable subsystems

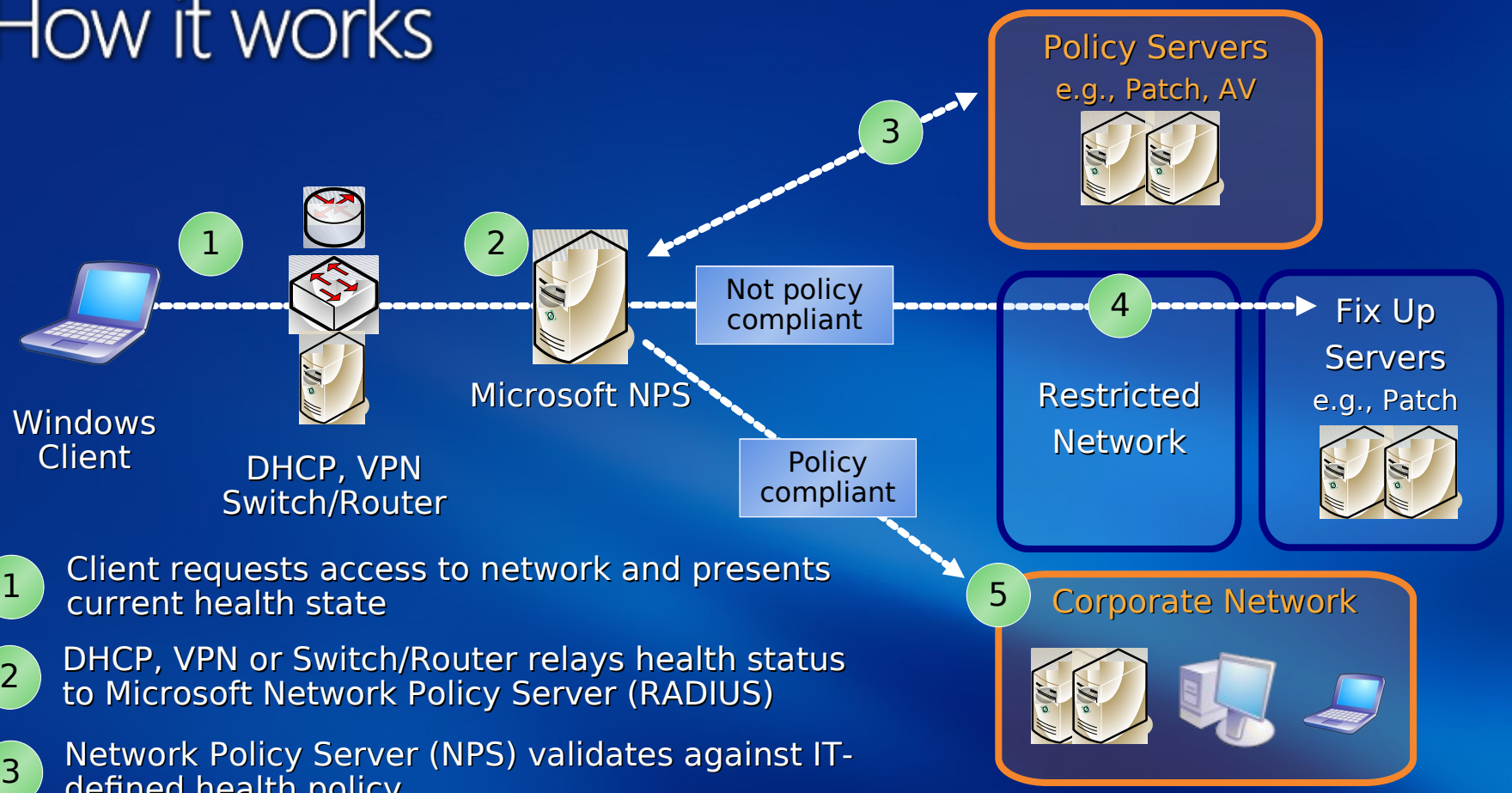
Flexibility

- Streamlined deployment with image-based setup
- Improved support for Branch Office deployments
- Access internal resources and applications remotely

How it works

Network Access Protection

How it works



1. Client requests access to network and presents current health state
2. DHCP, VPN or Switch/Router relays health status to Microsoft Network Policy Server (RADIUS)
3. Network Policy Server (NPS) validates against IT-defined health policy
4. If not policy compliant, client is put in a restricted VLAN and given access to fix up resources to download patches, configurations, signatures (Repeat 1-4)
5. If policy compliant, client is granted full access to corporate network

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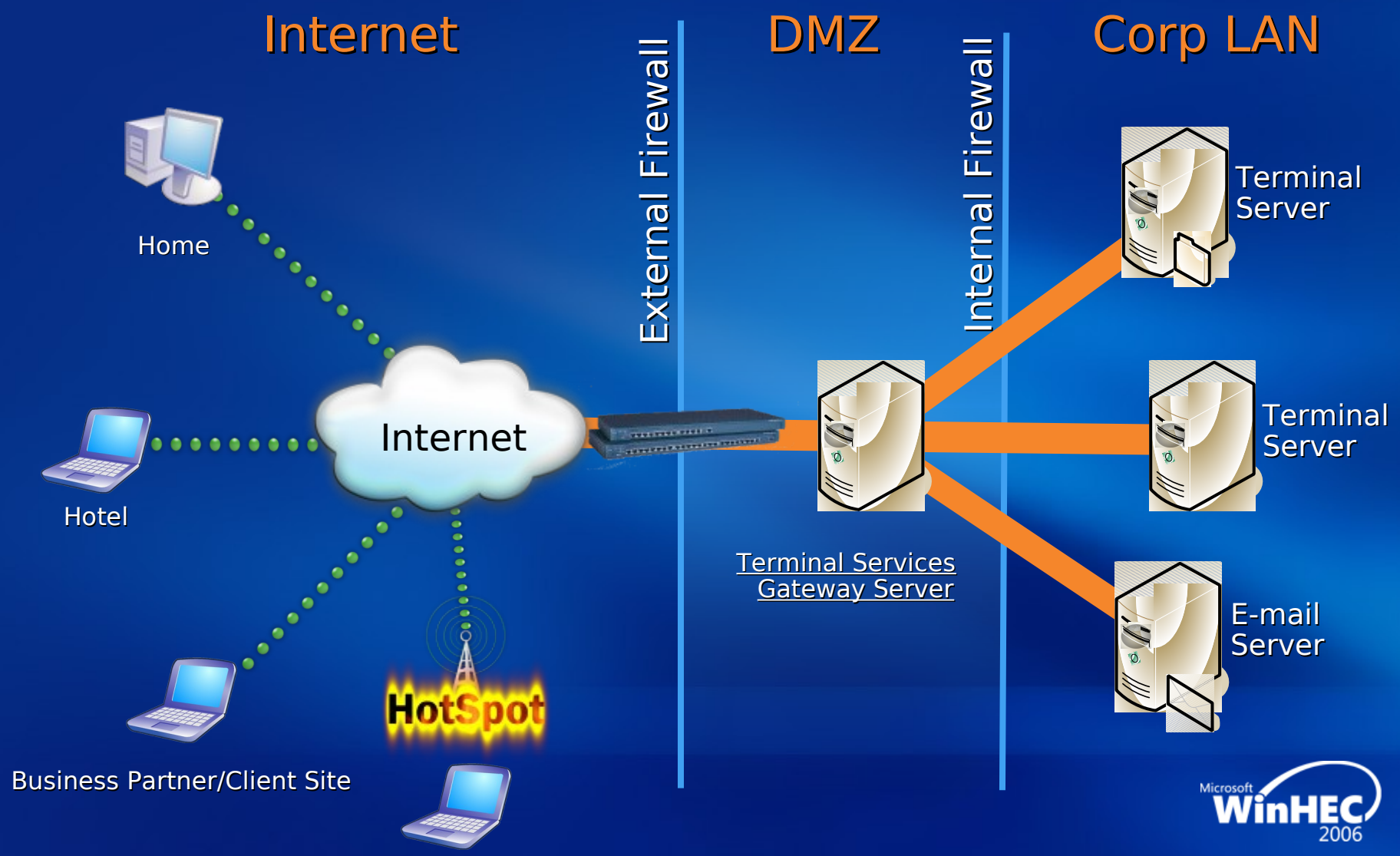
Terminal Services Gateway

Remote access to internal applications resources



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Applications Platform

Rapidly deliver new apps and experiences

Flexible Solutions

- Extensible development platform for Web solutions
- Delegated task-based Web server administration
- Modular Web server configuration

Connected Systems

- Windows Communication Foundation
- Federated security: Authorization, authentication and identity
- Uniform Web application and service activation model

Rich Experiences

- Windows Workflow Foundation
- Windows SharePoint Services 3.0
- Build on .NET and Win32 with existing development skills

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Internet Information Services (IIS) 7.0

IIS 7.0 Enhancements

- Extensible Modular Architecture
- Integrated Application Stack
- Distributed Configuration Model
- Delegated Management Tools
- Comprehensive Diagnostic Support

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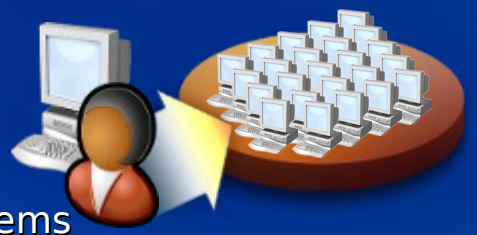
Windows Vista And Longhorn Server
Better together

More Efficient Management

- Single worldwide servicing model
- Event forwarding between client and server
- Faster and more reliable remote OS deployments
- Network Access Protection ensures health of connecting systems



Greater Availability

- Scalable print servers with client-side rendering
- Seamless offline experience with client side caching
- Transactional file and registry operations
- Policy-based quality of service to prioritize application bandwidth

Faster Communications

- Fast enterprise class search on clients and servers
- Faster networking with new TCP/IP stack and native IPv6
- Improved file-sharing performance over high-latency links
- Seamless remote access to internal applications and resources

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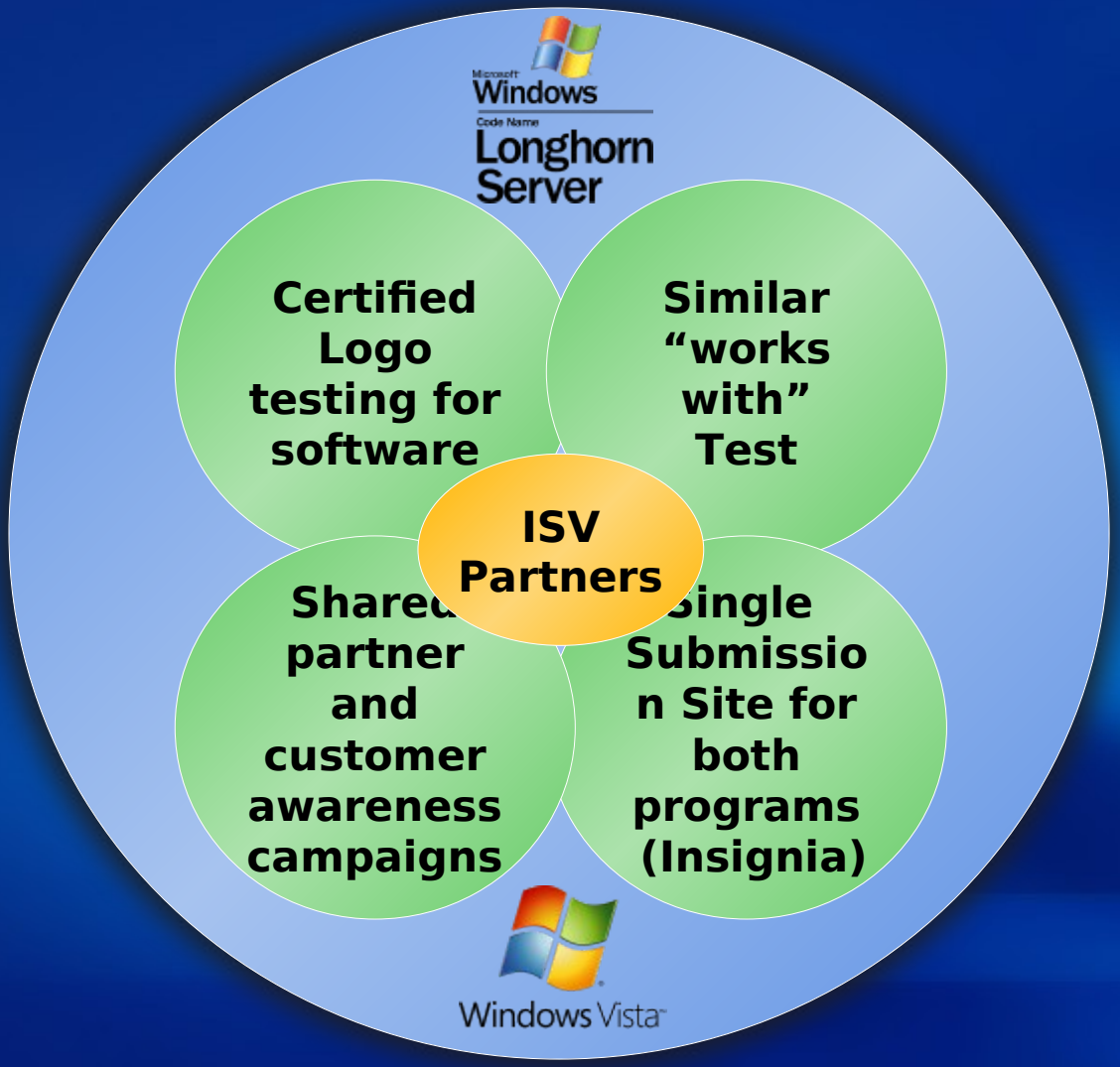
Windows Server "Longhorn" Logo And Windows Vista Logo For Software Relationship



More Value

Windows Server Longhorn Logo Program

Windows 2003 Certification	Server "Longorn" Logo Certification
Too expensive for ISVs [$20 -$35K]	Decrease cost by some automation
Testing time is too long [3-5 Weeks]	Decrease time by optimizing tests
Too many logos	Unify existing logos into one
Poor adoption rate of existing program [Only 3% of ISV base is certified]	Drive up adoption rate by evangelizing value of the program
No dedicated technical ownership since early 2004	Technical owner already in place for LH logo
No collaboration with client (DFW) Program	Joint marketing and certification Submission web site with Vista Logo

Windows Server "Longhorn" Wave

Mid-Market
Microsoft Windows Server
Codename "Centro"

Enterprise
Windows Server
Codename "Longhorn"

Small Business
Microsoft Windows Small Business Server

Windows Server
Codename "Longhorn"

HPC
Microsoft Windows Compute Cluster Server 2003

Web Hosting
Windows Server
Codename "Longhorn"

Branch
Windows Server
Codename "Longhorn"

Storage
Microsoft Windows Storage Server

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Call To Action

- Examine near term opportunities
  - Windows Server 2003 – Scalable Networking Pack
  - Windows Compute Cluster Server 2003
  - Windows Small Business Server 2003 R2
- Evaluate Windows Server “Longhorn” Beta 2
- Plan for Windows Server “Longhorn” wave of releases
- Get the Windows Server Logo
  - Windows Logo Program Requirements Suite, Version 3.0: http://www.microsoft.com/whdc/winlogo/hwrequirements.mspx
- Attend sessions for more detail
  - Windows Virtualization: Strategy and Roadmap
  - Windows Server Compute Cluster Server and Desk-side Clusters
  - Windows Compute Cluster Server 2003
  - Windows Server for the Mid-Market: Strategy and Roadmap
  - Windows Enterprise Storage Directions
  - Windows Server High Availability with Windows Server Longhorn Failover Clustering

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Advancing the Platform